



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

11A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,752	09/25/2003	Yoshiaki Aso	5854-28 (MTM-69-US)	9343
20575 7590 02/07/2007 MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204			EXAMINER COLON SANTANA, EDUARDO	
			ART UNIT	PAPER NUMBER

2837

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/671,752		ASO ET AL.	
	Examiner		Art Unit	
	Eduardo Colon Santana		2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/25/03; 6/1/04; 7/18/06</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Detailed Action</u> . |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 9/25/2003, 6/01/2004 and 7/18/2006 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it includes legal phraseology. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yashita et al. U.S. Patent No. 5,874,817.

Referring to claims 1 and 6-10, Yashita et al. discloses a motor driving circuit for a three-phase brushless motor having brake control methods as claimed (see all figures and respective portions of the specification). Yashita et al. states that the invention relates to a brushless motor rotating a recording medium such as CD-Rom, DVD, DVD-ROM, which are optical discs. Further, Yashita et al. depicts from figure 17a, a third embodiment comprising an optical disc drive having a spindle motor (11) having a permanent magnet rotor; a rotation number measuring means including hall effect sensors (12, 13 and 14) outputting pulse signals; brake means (19, 22, 23, 24), the brake means including at least three types of brake modes. Furthermore, Yashita et al. depicts from figure 17a a selecting means (MCU 24) for selecting one of the at least three types of brake modes in response to the rotation number measured (Hu+, Hu-; Hv+, Hv-; Hw+, Hw-) when the rotation number of the spindle motor is to be reduced (see figure 17a, 17b, 17c, 18 and Cols. 22-28). Moreover, Yashita et al. depicts a

Art Unit: 2837

driver for driving the spindle motor (11) including a plurality of switching elements (NPN transistors 1-6) and switching means (20, 21) for switching between on and off each of the plurality of switching elements.

As to claims 2 and 11, Yashita et al. addresses all the limitations of claim 1 above and in addition mentions that the motor is a three-phase having three coils and states that the three types of brake modes include a first brake mode which uses windage loss by idling of the spindle motor (this is call mechanical brake method in the art). Yashita calls the first mode (all short brake mode) see Col. 22, lines (30-40). The second brake mode is the short brake (commutated-short-brake) and the third brake mode is reverse brake mode (see Col. 22, lines 41-49).

Referring to claim 3, Yashita et al. clearly depicts in figure 18 a timing chart in which three ranges are shown for the first, second and third braking mode in respect to the rotational speed of the motor (see also Col. 26, line 49 to Col. 28, line 62).

As to claim 4 and 5, Yashita et al. discloses switching control signal generators (19 and 23), which acts as a judging means for judging whether the rotation number of the spindle motor reaches a predetermined value, when the brake means (deceleration) is applied. This process is completed when the signal generators (19 and 23) judge that the rotation number reaches the predetermined value and/or the rotation of the disc is stopped (see Col. 23, line 7 to Col. 25, line 56).

Referring to claims 12-14, the method steps are inherent in the product structure of claims 1-11 above. Further discussion is omitted.

Conclusion

5. The prior art made of record in form 892 and not specifically relied upon are considered pertinent to applicant's disclosure to further show the state of the art.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Colon Santana whose telephone number is (571) 272-2060. The examiner can normally be reached on Monday thru Thursday 6:30am - 5:00pm.

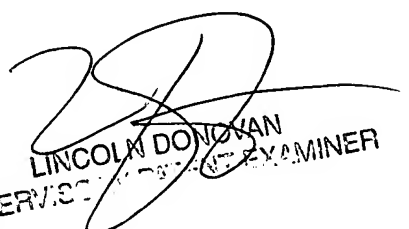
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 X.37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval system. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions contact the Electronic Business Center at 866-217-9197. If you would like assistance call 800-786-9199 or 571-272-1000.



Eduardo Colon Santana
Examiner
Art Unit 2837

ECS
January 26, 2007



LINCOLN DONOVAN
SUPERVISOR